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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/586,624	06/02/2000	Naoya Hasegawa	9281/3660	6578

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EXAMINER
BERNATZ, KEVIN M

ART UNIT	PAPER NUMBER
1773	

DATE MAILED: 08/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No.	Applicant(s)	
	09/586,624	HASEGAWA, NAOYA	
	Examiner	Art Unit	
	Kevin M Bernatz	1773	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 16 July 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☒ The period for reply expires *4* months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☐ The proposed amendment(s) will not be entered because:

   (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ they raise the issue of new matter (see Note below);

   (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: *See Continuation Sheet*.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a)☐ will not be entered or b)☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: *none*.

   Claim(s) objected to: *none*.

   Claim(s) rejected: *1-9*.

   Claim(s) withdrawn from consideration: *10-14*.

8. ☐ The drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☐ Other: _____

Continuation of 5. does NOT place the application in condition for allowance because: applicants' arguments have been considered but are not convincing. Specifically, applicants argue that Gill fails to teach that the soft magnetic "seed" layers are deposited in a recess of the free magnetic layer and that reliance upon Gill is therefore improper. The Examiner respectfully disagrees.

Applicants are reminded that a rejeciton under 103(a) is in view of the combined teachings of the prior art references, not whether eac individual references teaches the entire claimed subject matter. In the instant case, Lin provides clear teaching that the free magnetic layer is formed to possess recesses in the portions exterior to the track width (Figure 3 and col. 6, lines 33 - 46) even stating that "seed" layers are optional if the free layer is not extensively milled in the end regions. While Lin discloses forming ferromagnetic "seed" layers in the recessed portions, Lin fails to disclose forming these layers to a thickness exceeding the height of the free magnetic layer in the track width region. The Examiner has taken the position that it would have been obvious to determine an optimal thickness of the seed layers and that one of ordinay skill in the art would be readily apraised that the thickness could exceed the height of the free layer. Gill provides explicit evidence that the "seed" ferromagnetic layers located on the end regions between the free layer and the antiferromagnetic layer can be formed to a height greater than the surface of the free layer.

Furthermore, the Examiner notes that Gill is significantly different than Rottmeyer et al. in that Gill provides an explicit figure apparentl showing recesses in the free magnetic layer. While the Examiner acknowledges applicants interpretation of the dashed lines in Figure 7 of Gill, the Examiner can find no evidence in Gill that the MPEP interpretation of "dashed lines" was adhered to. The Examiner will acknowledge that Gill is ambiguous as to whether the free layer possesses recesses, but as noted above, Lin already provides explicit teaching that the free layer can be "ion-milled extensively" to form recesses, so Gill is not required to teach that limitation. Claims 1 - 9 have been rejected under the combined teachings of Lin in view of Gill (in addition to other references).

Kevin M. Bernstz

Kevin M. Bernstz

Primary Examiner

8/9/04